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## ABSTRACT

Five propositions, to be considered topics for further cross-cultural research, are discussed. It is recommended that questions of who has information and what causes information to flow should be examined before studying the operative value of any particular flow pattern in a setting. The propositions are: (1) the flow of information (two-step or other) depends on its content; it is the media as content, not as institutions or channels alone, that is important; (2) when information has high interest value and/or is relevant, it flows; relevance is a function of the message and the situation; (3) gatekeeping and personal influence are distinctly different phenomena in information flow; (4) opinion leadership is in part a function of the information a person has; and (5) illiteracy is not a barrier to the flow of development information through interpersonal channels and is not an impenetrable barrier to receiving information from mass media sources including the print media. References are provided. (KM)

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A RECONCEPTUALIZATION OF SOME FACTORS IN MASS MEDIA - INTERPERSONAL  
COMMUNICATION FOR DISSEMINATING TECHNOLOGICAL INFORMATION  
IN DEVELOPMENT PROGRAMS

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A RECONCEPTUALIZATION OF SOME FACTORS IN MASS MEDIA - INTERPERSONAL  
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DEVELOPMENT PROGRAMS

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The value of cross-cultural research is often misunderstood. Instead of helping us find the uniformities in societies, it more profitably aids us in identifying the variabilities. The end product is explanatory power through specification, not predictive power through generalization.

In a 1970 paper, Bostian examined cross-cultural implications of the two-step flow hypothesis. His review of previous research yielded a number of generalizations regarding the operation of this principal of communication in developing countries.<sup>1</sup>

Subsequent research at the University of Wisconsin permits reevaluation of these generalizations and the generation of others. Most of the propositions on this new list come with some supportive evidence. However, all should be considered topics for further investigation.

The propositions listed in this paper are not specific to the two-step flow hypothesis, although all have something to say about it. The reason for this is that we do not consider it very fruitful to launch directly into any study to see if a two-step or any other flow pattern is operative in a particular setting. Instead, we would argue that questions of who has information and what causes information to flow should be looked at first. When these questions

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are answered the investigator is in a better position to predict or at least hypothesize what the flow process is most apt to be. Such a procedure frees the researcher from having to accept the assumptions that went along with the original elaboration of the two-step flow hypothesis.

1. The flow of information (two-step or other) depends on its content. It is the media as content, not as institutions or channels alone, that is important.

It is somewhat paradoxical that development communication studies have for the most part concentrated on sources, channels and receivers. Content rarely enters the research design.

Yet surely what is said must make a difference. The vast literature on persuasive communication research shows that in most cases what is said outweighs how it is said, who says it, and in what situation, when it comes to changing attitudes and behavior.

Readership studies show the overriding importance of content as a best predictor of readership. Utility, a content variable, often shows up as an alternative explanation for many selected exposure study results.<sup>2</sup> How strange then, to see content ignored or treated as a constant rather than a variable in most development communication studies.

When mass media contact is found to correlate with practice adoption, it is often implied that the media stimulated adoption by furnishing useful information. Answers to questions as to what information respondents received from the mass media (usually not included) almost always discourage cause and effect speculations. This is not to argue that mass media can not play an important

function in aiding agricultural development. However, the present role of the mass media is usually not synonymous with potential role.

Fett did a content analysis of the 54 newspapers published in the state of Rio Grande do Sul, Brazil. He found that agricultural news accounted for 6.8 percent of the news hole. But only 9.2 percent of this agricultural news had high situational relevance -- information that farmers could use in their farming operations.<sup>3</sup>

In his Afghanistan study, Whiting found that the mass media carried very little relevant technical information about agriculture. The apparent reason for this was a paucity of information produced by the technical and scientific sectors of the society.<sup>4</sup> The mass media can only carry, not produce, news of technological opportunities.

A content analysis by Barghouti showed that Jordanian newspapers, radio and television each devoted only one percent of its time or space to agricultural programming.<sup>5</sup>

Logically, what doesn't exist, or is very rare, can't flow. The two-step flow hypothesis came out of studies of political campaigns -- a topic to which the mass media in the United States devote considerable time and space.

It has had some support in the United States in agricultural diffusion studies also. However, in the United States, Land Grant Colleges not only keep turning out a constant stream of new technology, but are required by law to keep feeding information about the new findings and recommendations to the mass media.

The situation in developing countries is often similar in regard to political news, but seldom is it the same in regard to agricultural news. Barghouti found that 79 percent of the Jordanian farmers he studied indicated the mass media as their main source of political information. But only 9 percent said the same of the mass media as a source of agricultural information. Combining media, multiple correlation showed three channels explained 38 percent of the variance in political knowledge, but only 8 percent of the variance in agricultural knowledge.<sup>6</sup>

Among the Afgan farmers studied by Whiting, only 5 percent indicated the mass media as their initial source of agricultural information.<sup>7</sup>

The use of the media is determined by what it provides. In many places a two-step or multi-step flow doesn't exist because the assumptions of the model aren't met.

2. When information has high interest value and/or is relevant, it flows. When so-called development information is not relevant (when people can't act on it) it is little sought and discussed. Relevance is a function of the message and the situation.

This is an extension of the first proposition. How relevant a message is depends on how well it addresses itself to the felt needs of its recipients, and how well it reduces their uncertainties.

To determine what is relevant information, you have to talk

to receivers and not just senders. Senders may not be attuned to the real concerns of peasant farmers. Byrnes points out that change agents at times promote new practices that are not technically appropriate.<sup>8</sup> Fliegal says because change agents often lack practical experience with advocated innovations, they at times convey an "official perspective" that is not entirely consistent with the "reality" of their clients.<sup>9</sup>

Coorientation studies keep showing that accuracy between senders and receivers of development information is often not impressively high.<sup>10</sup>

All of this implies the need to provide opportunities for systematic feedback. Better still, is to provide some mechanism for diachronic communication in which peasants can communicate their problems and needs for information rather than simply responding to messages they have received, as with feedback.<sup>11</sup>

As a result of increased diachronic communication we would expect accuracy to increase (in the coorientational sense). This in turn should lead to higher empathy, which in turn should lead to increased source credibility, particularly on the trustworthiness dimension.

In a Brazilian study, Fett found that search for market information related directly to market responsiveness. Even though a large number of markets existed for some products, there was little price information search because farmers correctly noted collusive pricing policies and other factors that restricted marketing choices available to them.<sup>12</sup>

On the other hand, messages do flow when they are relevant. Brown reported that 83 percent of his Chilean peasant respondents said they had participated in "several" conversations about the farm information circular letter sent to them.<sup>13</sup>

Of the Brazilian farmers who listened to or read any of three "planted" agricultural information articles in the newspaper and on radio, 46 percent talked to others about the stories.<sup>14</sup>

The amount and kind of information flow depends in part on the felt needs for information. Most day-to-day decisions are habitually made. Information exchange either doesn't take place or it takes place in casual contact with others. This is not necessarily an irrational process. The sheer number of decisions to be made in any given day preclude weighing of alternatives for all of them. Successful, or at least satisfactory outcomes, reinforce the habitual behavior and it becomes an efficient way to handle the hundreds of small decisions made daily.

But when an indeterminate situation arises -- what Grunig calls a "cross-roads" decision<sup>15</sup> -- active information search is initiated. . The information intake situation shifts from one of casual surveillance to active search. Considerable effort may be made to get information from authoritative sources. Bauer,<sup>16</sup> Van den Ban,<sup>17</sup> and Lionberger<sup>18</sup> have all noted that as information sought becomes more important the person will seek out more authoritative sources.

A consequence of this is that a two-step flow process is more apt to take place in those situations where information is urgently needed and useful. Otherwise it either doesn't flow at all or



passes along a rather casual chain with number and frequency of social contacts determining the extent and speed of spread.

This may also help clarify the proposition that proportionally more interpersonal communication exchanges in traditional areas are homophilous than in modern areas.<sup>19</sup> We would argue that this is largely due to restricted opportunities and restricted geographic mobility.

Information intake seldom shifts to active seeking from authoritative sources because the peasant farmer doesn't have many opportunities to make "cross-roads" decisions. His situation restricts his parameters of decision making. Like his more modern farmer counterpart, he attempts to get authoritative information when he needs it, but he doesn't need it as often.

Fett found that few Brazilian farmers indicated neighbors and friends as preferred sources for information about what products to raise, what fertilizer to use, and how to obtain rural credit. Change agents ranked highest for all three kinds of information.<sup>20</sup> A later study in the same area showed change agents to be preferred sources of information about new agricultural practices. But most conversations about three selected farm practices were with neighbors, not with the change agents or others in the community identified by farmers as leaders.<sup>21</sup>

It is possible that some of our respondents indicated change agents as preferred sources of agricultural information because they thought that was what we would like to hear. However, the

results were so overwhelming in this direction, and farmers volunteered enough comments in support of this opinion, that we find it hard to believe our data invalid.

A more plausible explanation is that the agricultural topics being discussed simply weren't so important to them that they sought out authoritative sources for more information. Restricted opportunities lead to lessened motivation to seek out experts and/or opinion leaders.

In addition to the peasant farmers having less motivation to seek authoritative sources for information, they also have to make a greater effort when they do. This, too, tends to increase the relative number of homophilous exchanges they participate in.

Poor roads and transportation often by animal or an occasional bus simply make it more difficult to reach people outside of easy walking distance. Scarce or non-existent telephone and mail service also complicate contacts with outside sources.

As motivation increases and effort decreases, one is more apt to see a two-step flow operating.

3. Gatekeeping and personal influence are distinctly different phenomena in information flow.

Agricultural development information in the mass media is usually persuasive and its "second-step" flow through interpersonal channels generally has personal influence attached. The more homophilous the relationship in the interpersonal communication dyad, the more opinion sharing takes place.

Many researchers have failed to conceptually or operationally distinguish between gatekeeping and personal influence behavior. News diffusion studies have generally dealt with the spread of news about the "events of the day" -- hard news. In agricultural development communication we are concerned with "instructional articles" -- soft news. Inasmuch as hard news is about something which happened, the interpersonal spread of information about it can often proceed merely as a retelling of the elements in the original message -- a gatekeeping function. Personal opinion flowing with the message is usually aimed at the actors in the event -- did they act properly or not.

The situation differs in the case of articles about recommended farm practices. Here the distinct purpose of the article is not only to inform, but also to persuade. A person merely acting as a gatekeeper when he passes on the message is already passing on influence elements. But it is difficult to think of messages of this type passing through interpersonal channels without additional influence attached. Indeed, the fact that the initiator of the communication exchange holds an opinion on the subject is probably what triggered his talking about the topic in the first place.

Furthermore, the personal opinion which attaches to the message as it flows through interpersonal channels is aimed only minimally or not at all at the actors in the story. Instead, it is personal influence aimed at the receiver of the message -- what should or shouldn't he do about the recommended practice. Interpersonal relations provide not only channels of information, but

they also are sources of social pressure and support.

In India, Forman found that influence went along with the message in 98.6 percent of the cases of communication between opinion leaders and other farmers.<sup>22</sup> This influence is usually not one way, but is a sharing of opinion.<sup>23</sup>

From a practical standpoint, it is possible to see situations in which funneling messages about new farming practices through opinion leaders may be inadvisable even though the message disseminates rapidly in this way. In an area essentially against change, we would expect opinion leaders to be more apt to be guardians of the status quo, and this would reflect in the influence they attached to messages they spread.

4. Opinion leadership is in part a function of the information a person has.

As many authors have pointed out, it is erroneous to think of opinion leadership as a dichotomous variable, even though we tend to treat it this way in our research designs. Attempts to list characteristics held by leaders and not others have been mainly fruitless. Those qualities which opinion leaders have are widely dispersed throughout the population.

Furthermore, opinion leadership is generally specific to a particular topic or topics. Although opinion leadership is usually more polymorphic in developing countries, it still tends to be generally specific to the message. Forman found that high givers of information as well as the very active communicators tended to

specialists rather than generalists. Furthermore, giver-receiver relationships, with roles unchanged, did not carry over from one message to another.<sup>24</sup>

It may be best to shift the previous definition from identifying leaders to identifying leadership acts.

The opinion leader is often merely one of the first to have information on a particular topic. Because of this, he is sought for the information he has. A fault of much of the opinion leadership and information diffusion research has been in not differentiating between givers and seekers in communication dyads. There is both practical and theoretical value in knowing who initiated the communication.

Although Forman's Indian opinion leaders were principal sources of information about the agricultural topics being studied, in only 4 percent of the cases did they take the initiative in starting the conversation about the new practice.<sup>25</sup>

If opinion leadership is in part a function of the information held by a person, it should be possible to create opinion leaders (or promote opinion leadership acts) by supplying information to those who are most apt to pass it on to others and to pass favorable influence along with it.

5. Illiteracy is not a barrier to the flow of development information through interpersonal channels, and is not an impenetrable barrier to receiving information from mass media sources including the print media.

Although limited, most evidence seems to indicate that massive

literacy programs are not necessary before information programs, including those using mass media, can be put into practice. This point is argued in other articles<sup>26</sup> and will not be discussed further here.

Regarding communication flow, Brown found that illiterate farmers scored statistically significant gains on knowledge tests from printed educational materials provided them. Thus they learned from someone who could read -- a modified two-step flow.<sup>27</sup> Others have also noted this dependent literacy.<sup>28</sup> However Brown found that proportionately more literates than illiterates were involved in interpersonal diffusion of the messages.<sup>29</sup>

Barghouti found literates did not differ from illiterates in contacts with specialized sources of agricultural information.<sup>30</sup>

In conclusion, we again argue that studies of information flow patterns or statements of support or non-support of the two-step flow hypothesis can not meaningfully be made without also addressing the question of what information is available, who has it, and how great is the need for it.

## NOTES

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